

Amendments to the Specification:

Please amend the paragraph starting at page 1, line 17 and ending at page 2, line 7 to read as follows.

Conventionally, for example, in a typical arrangement for a color image forming apparatus using an electrophotographic system, developing apparatuses are provided in the same number as kinds (number of colors) of developers (toners) to be used, and electrostatic latent images corresponding to the respective kinds of developer (toners of the respective colors) are developed, whereby a developer image of desired colors or desired number of colors is obtained. In particular, in order to reproduce a full-color image, an image forming apparatus using developers of ~~different four~~ four different colors, namely, cyan, magenta, yellow and black, has been put to practical use. In addition, in a single color image forming apparatus, a method of using plural kinds of developers having different concentrations to enhance gradation property in representing the tone has also been proposed.

Please amend the paragraph starting at page 9, line 22 and ending at page 10, line 14 to read as follows.

The image forming apparatus 100 of this embodiment includes a first station Pa and a second station Pb as image forming parts. The image forming apparatus 100 transfers developer images (toner images), which are formed on drum type electrophotographic photosensitive members (hereinafter referred to as "photosensitive drums") 1a and 1b serving as image bearing members provided in the respective stations Pa and Pb, onto an intermediate transferring belt 17 serving as an intermediate transferring member,

composites the developer images thereon, and further transfers the composite toner image onto a recording material P to obtain a recorded image. In this embodiment, two developing apparatuses 7a and 7b serving as developing means are arranged. The respective developing apparatuses 7a and 7b supply developers (toners) of two colors, whereby developers of a total of four colors are superimposed one on top of another and image formation is performed.

Please amend the paragraphs starting at page 10, line 25 and ending at page 12, line 2 to read, as follows.

A photosensitive drum 1 is driven to rotate in a direction indicated by arrow in Fig. 1. ~~the figure~~. A charging roller 2 serving as charging means is provided around the photosensitive drum 1. The charging roller 2 receives power supply from a charging high-voltage power supply (not shown) to charge the surface of the rotating photosensitive drum 1 uniformly to a fixed potential. A laser beam E emitted from a laser scanner 4 serving as exposing means is reflected on a reflection mirror 3 and irradiated on the charged surface of the photosensitive drum 1. Consequently, an electrostatic potential varies in a part subjected to exposure E on the photosensitive drum 1, and an electrostatic latent image according to desired image information, which is subjected to color separation, is formed on the photosensitive drum 1. Subsequently, in a part where the developing apparatus 7 and the photosensitive drum 1 are opposed to each other (developing part) G, the electrostatic latent image is developed by toners of desired colors and visualized as a toner image.

With reference to Fig. 10, the ~~[[The]]~~ toner image formed on the photosensitive drum 1 is transferred onto an intermediate transferring belt 17 in a primary transferring part N1 where a primary transferring roller 9 serving as primary transferring means comes into abutment against the photosensitive drum 1 via the intermediate transferring belt 17. In the primary transferring part N1, a transferring bias of desired polarity and potential is applied to the primary transferring roller 9.

Please amend the paragraphs starting at page 12, line 12 and ending at page 13, line 17 to read, as follows.

In the developing apparatus 7a provided in the first station Pa shown on the right side in Fig. 1, ~~the figure~~, a yellow developer (negatively charged toner) serving as a first developer of a negative charging property (first charging polarity) and a black developer (positively charged toner) serving as a second developer with a positive charging property (second charging polarity) are contained. In the developing apparatus 7b provided in the second station Pb shown on the left side in Fig. 1, ~~the figure~~, a cyan developer (positively charged toner) serving as a first developer with a positive charging property and a magenta developer (negatively charged toner) serving as a second developer of a negative charging property are contained.

First, a cyan toner image and a black toner image are formed in the respective photosensitive drums 1a and 1b with the cyan toner (positively charged toner) and the black toner (positively charged toner) according to a regular developing method well known to those skilled in the art (here, moving a developer to an unexposed part of an image bearing member charged in a polarity opposite to a charging polarity of the

developer (negative polarity) used in a conventional analog copying machine or the like. Then, the cyan toner image and the black toner image are transferred onto the intermediate transferring belt 17 by primary transferring rollers 9a and 9b, to which a bias of the negative polarity is applied from the primary transferring bias power supplies 41a and 41b, and superimposed one on top of the other on the intermediate transferring belt 17 at a primary transferring part N1. [[17.]]

Please amend the paragraph starting at page 27, line 22 and ending at page 28, line 6 to read, as follows.

The regulating blade 6 is required to be set so as to pass only the first toner layer L1. If the regulating blade passes the second toner layer L2 as well, colors of toners to be furnished for development are mixed. Then, due to the positively charged toner Tp mixed on the developing roller 5, "color fog" in which the positively charged toner Tp adheres to a white base part occurs. In addition, since adhesion of the negatively charged toner Tn to a normal print part is prevented, local unevenness of concentration occurs. Thus, it is undesirable to pass the second toner layer L2. [[12.]]

Please amend the paragraph starting at page 41, line 22 and ending at page 42, line 2 to read, as follows.

In order to have little color mixing for both the two colors as described above, it is important to form the first toner layer (single color layer) L1, which consists of a sufficiently charged large amount of toner and the second toner layer (mixed developer

layer) L2, which is formed on the first toner layer L1 with a weak adhesive force, and ~~scrape~~ scrapes off the second toner layer L2 with the regulating blade 6.

Please amend the paragraphs starting at page 43, line 1 and ending at page 44, line 11 to read, as follows.

Moreover, it is important to remove substantially the entire second toner layer L2 with the regulating blade 6 in preventing color mixing. FIG. 6 shows a diagram (diagram viewed from the back of the paper surfaces of FIGS. 2 and 3) illustrating removal by the regulating blade 6. In Fig. 6, ~~the figure~~, a semicircle with a radius R indicates the developing roller 5, which rotates in a direction of arrow in the figure. In other words, reference character R denotes a radius of the developing roller 5. The curved part (inflected part) 6A with a curvature radius r is provided in the vicinity of the tip of the regulating blade 6. An abutting part (nip part) of the regulating blade 6 and the developing roller 5 is represented by a point B, and a length of a segment BC from the point B to a point (start point) C before the curved part 6A (length from the nip to the end: NE length) is x. A point A is an end point of the curved part 6A when the curve of the regulating blade 6 is 90°. Further, a distance h from the point A to the developing roller 5 is defined as a taking-in height of the regulating blade 6. A portion from the curved part 6A to the abutting part B substantially constitutes a layer regulating part which allows passage of the first toner layer L1 following movement of the surface of the developing roller 5 and regulates passage of the second toner layer L2.

The first and the second toner layers L1 and L2 on the developing roller 5 are regulated by the regulating blade 6 and scraped off from the outermost layer. However, it

is difficult to measure and cannot be said indiscriminately to which height in Fig. 6 the ~~figure~~ the first and the second toner layers L1 [[La]] and L2 are scraped off. In an experimental result of the inventor, in order to obtain a sufficient separation performance of the regulating blade 6, the taking-in height h was required to be at least 550 μm or less.

Please amend the paragraph starting at page 44, line 21 and ending at page 45, line 8 to read, as follows.

From FIG. 7, it is seen that the charging amount is large if the toner coating amount is small, the charging amount is small if the toner coating amount is large, and only a toner having a strong reflection force with respect to the developing roller 5 can pass if the regulation by the regulating blade 6 is tightened. In Fig. 7, ~~the figure~~, points marked with an \times indicate a case in which color mixing has occurred. In addition, points marked with an \circ indicate a case in which a ratio of the numbers of particles of different colors is 9:1 (90%) or more, and the points marked with an \times indicate a case in which the ratio is lower than that. As the taking-in height h became smaller, the toner coating amount decreased and, as the taking-in height h became larger, the toner coating amount increased.

Please amend the paragraph starting at page 46, line 21 and ending at page 47, line 20 to read, as follows.

A result of FIG. 8 was obtained as described below. After continuously operating the developing apparatus 7 for ten hours switching the potential difference between the developing roller 5 and the removing/supply roller 13 to -400 V and +400 V every ten seconds, a state of color mixing of the developing roller 5 was observed by a microscope in

the respective cases in which the potential difference was -400 V, 0V and +400 V. In Fig. 8, the figure, points marked with an × indicate a case in which color mixing has occurred. In addition, points marked with an ○ indicate a case in which the ratio of the numbers of particles of the negatively charged toner Tn and the positively charged toner Tp is 9:1 (90%) or more at the time when the potential difference is -400 V and the ratio of the numbers of particles of the negatively charged toner Tn and the positively charged toner Tp is 9:1 (90%) or more at the time when the potential difference is +400 V, and the points marked × indicate a case in which the number of the particles is 90% or less at any potential difference. Further, in Fig. 8, points marked with an ~~the figure~~, □ indicate ~~indicates~~ a case in which fusion bond of the toner is observed on the developing roller 5 at the time when the potential difference is 0. If the toner is fused and bonded to the developing roller 5, unpreferably, deterioration of a developing performance or image streak is generated.